SPARKS

SCHOOL of ENGINEERING of Milwaukee

IN THIS ISSUE

SKETCHES EAST OF SUEZ
By CLIVE ST. MARTIN

EIGHTH ANNUAL EAA CONVENTION

DRY ICE
By HENRY HURD

TWO PAGES OF PICNIC PICTURES

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THE RADIO CLASS AT CHICAGO

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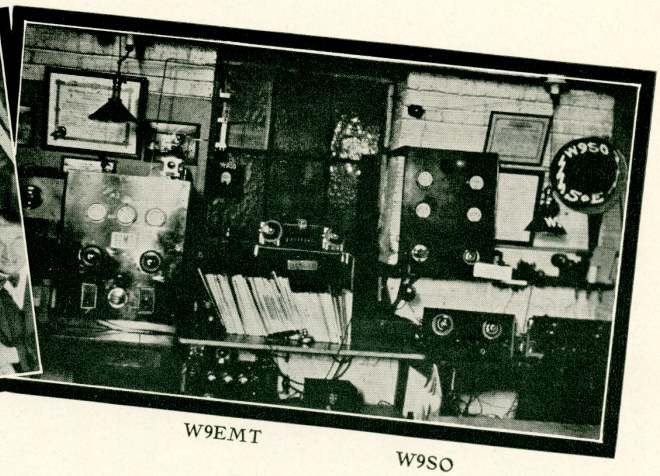
School of Engineering Radio Club

OFFICIAL RELAY STATION A.R.R.L.
WESTERN KEY STATION C.R.U.

ANNUAL BANQUET



W9EMT W9SO

The College Radio Union

THE latest development due to the interest taken by the college students in amateur radio communication is the organization of the College Radio Union.

The twofold purpose of this union, which is now being organized so that it will be operating by the beginning of the fall term of 1929, is first, to broadcast college news—such as results of athletic activities and to handle intercollegiate student traffic; and second, to promote a close union between the radio clubs of the colleges of the country so that they may exchange freely and easily their experiences in amature radio transmission.

The prime mover of this organization is the George Washington Radio Club under the direction of its executive committee, which is composed of H. S. Cole and A. W. Small. The constitution as drawn up by the executive committee of the G. W. R. C. and amended and passed by the associate stations, divides the United States into two sections, the Eastern section and the Western section.

The key station of the Eastern section, which is made up of the first, second, third, and fourth Radio districts or approximately the section of the United States east of the Allegheny Mountain Line, is W2HJ, the station of the College of the City of New York, with I. J. Newman as chief traffic manager.

Because of its previous wide experience and range W9SO, the School of Engineering Station, has been chosen as the key station of the Western section—practically all of the United States west of the Allegheny Mountains, Alaska, the Hawaiian Islands, and the Philippine Islands. This vast area is now being organized by William P. Gainer, chief operator of W9SO. The plan of organization calls for one university or college radio club in each state of sufficient power and schedule time, which is to act as a key station for all the communication of that state. These state key stations are in turn responsible to the section key stations which together with the executive committee at Washington will control the activities of the Union. Although the Union has been organized only recently, a large number of colleges have expressed their desire to become members; and stations in Louisiana, Michigan, Kentucky, Iowa, Virginia, Maryland, New York, Maine, and New Hampshire are already taking an active interest in the work of the Union. The Union bids fair to take a very active part in the collegiate amateur radio work; and as W9SO is to be an important part of the Union, there will be a great deal of very interesting work for all members of the S. O. E. Radio Club.

School of Engineering Radio Club

Picture on Cover

THE feature picture on the cover of this issue of 'Sparks' was taken on board of the Goodrich ship 'Wisconsin' as it docked on the municipal pier at Chicago with its load of sixty Student Radio Service Men, the occasion being the inspection of the Third Annual Radio Manufacturers Convention. While this picture was being snapped Fox Movietone recordings were also made as the officers of the R. M. A. greeted Messrs Vaughn, De Land, Gainer and Richards with their group of radio 'bugs'. After being thus greeted the boys proceeded to the Stevens Hotel where they registered for the Convention. The registration card served as a pass to all parts of the Convention which

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School of Engineering Radio Club

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were distributed between the Stevens, Congress and Blackstone Hotels. The Boys formed groups and inspected what was most interesting to them. The fact that so very little television apparatus on display dissappointed the boys very keenly but an exceedingly good lecture on that subjected righted this dissappointment.

Among the item of interest to the Students were the different types of receiving sets. Interesting from the engineering standpoint in both the electrical and mechanical design. It seems to be a screen grid year and manufactureres were using the new cx345 power tube to a great extent. The types of circuits varied

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more than they have for a considerable time with band pass filters, tuned r.fs and combined band pass and r.fs circuits mast prominent.

The advancements in tube structure was remarkable. Cathode ray and neon tube exhibits showed what great possibilities there are in this phase of radio work.

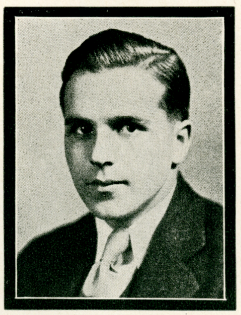
The loud speaker exhibits this year still cling to the dynamic types with the new developments in the inducter type dynamic and the condenser speaker as used in public address work at the convention and as installed by the United Reproducers Corp. and the Sampson Electric Co. (power amplifiers).

All in all the advancements in this year far exceed the developments of recent shows.

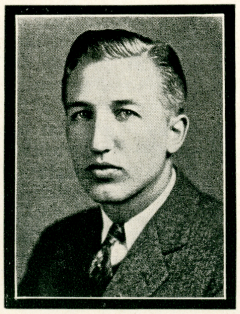
These conventions provide an excellent basis for Radio students to see what is going on in the radio world and all the fellows are looking forward to meeting at the Fourth Annual Show next Spring.

American Institute of Electrical Engineers

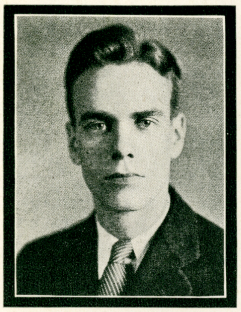
The School of Engineering of Milwaukee, Branch



THOMAS J. COLEMAN
President



WILLARD L. HAEGGQUIST
Vice-President



CHARLES H. SKINNER
Treasurer

KARL O. WERWATH
Secretary

TEN years ago the Board of Directors of the American Institute of Electrical Engineers authorized the establishment of the School of Engineering of Milwaukee Branch. The organization meeting was held on Edison Day, October 21, 1919 at which Dean John D. Ball presided. A set of by-laws was adopted, officers elected and the branch began to function. The large number of advantages that the student membership of A. I. E. E. offers assured the immediate success of the Branch; it has for the last ten years been an important factor in the school activities. The membership of the School of Engineering Branch at the end of the Spring Term of the year according to the Blue Book of the A. I. E. E. was the fourth largest of all branches of the organization.

During its existence the Branch has brought lecturers and personages of national prominence to its members. Among the visitors this year was the national president, Robert F. Schuchardt, who attended a combined meeting of the Milwaukee Section, the Marquette University Branch and the School of Engineering Branch held at the School of Engineering Auditorium. President Schuchardt favored this type of meeting very highly since it is an excellent means of linking the men in the field who are constantly looking for capable young engineers to help them carry out their plans. These students of the colleges of today are the engineers of tomorrow. Thus with the adoption of a few of these meetings in each year's curriculum of activities, the highest aim of the Institute, to promote activities for the advancement of the Electrical Engineering Profession, is accomplished. Meetings of this type are being planned as a part of the next year's activities.

The last meeting of the year was held in June, at which time the officers for the next four quarters were elected with results as follows:

T. J. Coleman, president
Willard Haeggquist, vice-president
Karl O. Werwath, secretary
Charles Skinner, treasurer
President Oscar Werwath was chosen as counsellor

School of Engineering Radio Club

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Of General Interest

Two other recent visitors at the School from the far east were Mr. and Mrs. J. A. Daugherty of Christchurch, Australia. Their son is planning to entr the School in the fall as a student of Electrical Engineering and naturally the parents would like to see the School. After finishing the inspection it was suggested by your editor who happened to be their guide that they visit the radio stations on the roof. Since Mr. and Mrs. Daugherty had never seen a radiocast station before, Station WISN interested them very much. But a real surpise awaited them at the students amateur station W9SO. The guide glancing among the communication confirmation cards that "paper" the walls of the 'ham shack' came upon one from Christchurch, Australia. Upon the mention of his home city Mr. Daugherty adjusted his quaint silver rimmed spectacles and reached for the card. As he read his face shone with pleasure and when he had finished he exclaimed in his musical english drawl "By Jove, this man lives within three blocks of my house!"

Due to the success of the plan of the Montreal School, the administration of the School is planning similar branches in other sections of America. Mr. Fred C. Raeth, who is now the president of the Canadian School will be General Manager of all of these branches. Taking his place in Montreal is Mr. V. M. Murray whom we all know now as the head of the Refrigeration Department at the Milwaukee School. Mr. Charles Birkett the present Secretary-Treasurer of the Montreal school is coming to Milwaukee and Mr. E. DeMers at present with the Chicago Branch will take his place in Montreal. This organization is to be expanded as plans materialize and soon great activities can be expected from all of the branches. We hope to be able to give each branch a section of the future issues of Sparks so that they can send us all of their news.

President Oscar Werwath was heartily received by many of his former students when he visited the New York offices of the R. C. A. Photophone Inc., during a recent visit in New York City. On the same trip President Werwath was among the group of Milwaukeans who officially welcomed the new Hamburg American Motorship Milwaukee after its first voyage across the Atlantic. Especially interesting to him were the intricate electrical control devices completely controlling the ship which he saw as he was inspecting this huge sister ship of the St. Louis.

A copy writer for an Australian advertising agency wound up his advertising for an automatic water heater with: "There's certainly nothing more automatic in its actions unless it's the solar system."

Six replies came in. Four people asked for prices and particulars of the solar system, and two asked where they could see it in operation.

—Printers' Ink.

Dean John D. Ball is visiting the laboratories and shops of the General Electric Company at Schenectady, New York, during the earlier part of August. The visit will recall many scenes of Dr. Ball's earlier life since it was at General Electric that he did his research work on magnetism as an assistant to the late Dr. Charles P. Steinmetz.

A recent visitor at the school was Dr. Clement Kua, of Canton, China. Suave, polished, of charming personality, speaking Russian, French and English as well as his own language, Dr. Kua is a good representative of the new "Young China" movement. He is studying the educational systems of America for the Chinese government—work for which he is exceptionally well fitted because of his educational experience at home. His survey has carried him to the important educational centers of America among which are Columbia, Northwestern, Stanford, Wisconsin, Notre Dame and Chicago Universities.

None of you except the editors of Sparks can appreciate the part that the people who do the professional work on this Quarterly do play in its success. The staff and I wish to take this opportunity of thanking the personnel of the Hammersmith-Kortmeyer Co., especially Mr. P. W. Hammersmith, Mr. Winchester and Mr. Johnson for their valuable suggestions in bringing out this—our first attempt at this type of magazine and O. F. DeLonge and Mrs. McCrannen of the DeLonge Studio for their excellent work on the individual pictures. With such splendid cooperation the Staff hopes to bring you succeeding numbers that you will be exceptionally proud of both, because of the quality of makeup and the interesting nature of their contents.

The staff hopes that you have enjoyed reading this issue as much as it has enjoyed preparing it for you. The issue has been edited so as to give you the aims of the organizations of the School. The purpose of the succeeding issues will be to give something of interest to every student, alumni, faculty member and friend of the School by presenting the activities of these organizations, which fundamentally are the activities of the individuals. Articles and snaps are also very interesting and each suggestion and idea adds to build a greater Sparks for you. The greater Sparks the greater joy you will have as you pick it up and look it over in future years, and reflect back to your years at S. O. E. But remember Sparks can be only as big as each individual helps to make it.

Are you with us?

YOUR EDITOR.